Claims

What is claimed is:

- 1 1. A system for generating a report by a reporting tool of a SAP business information system
- 2 using data included within an Aspect file, said system comprising a non-SAP bridge program
- adapted to generate the Aspect file through use of data derived from a dataset and to transmit the
- 4 Aspect file to the SAP business information system.
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- (1)
- 2. The system of claim 1, wherein the dataset is a non-SAP-formatted dataset.
- 1 (3) 3. The system of claim 1, wherein the dataset is a SAP-formatted dataset.
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- 1 4. The system of claim 1, wherein the SAP business information system comprises an SAP
- 2 Executive Information System (EIS).

5. A system for generating a report by a reporting tool of a SAP business information system

2 using data included within an Aspect file having rollup records, said system comprising a non-

3 SAP bridge program adapted to generate the Aspect file through use of data derived from a

dataset and to transmit the Aspect file to the SAP business information system, said dataset

having a keygroup, wherein to generate the Aspect file includes to roll up a portion of the dataset

with respect to the keygroup, wherein each rollup record has a rollup field and a quantity field,

wherein the rollup field stores a rollup keyvalue of the keygroup, and wherein the quantity field

stores the number of dataset records that have the same rollup keyvalue.

6. The system of claim 5, wherein the bridge program is further adapted to cause the rollup

records in the generated Aspect file to be sorted with respect to the keygroup.

7. The system of claim 5, wherein the dataset is a non-SAP-formatted dataset.

8. The system of claim 5, wherein the dataset is a SAP-formatted dataset.

9. The system of claim 5, wherein the bridge program is further adapted to generate a trace file

that includes a representative rollup keyvalue of the keygroup and a pointer that points to a

portion of the dataset, said portion being correlated with the representative rollup keyvalue.

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- 1 10. The system of claim 5, wherein the SAP business information system comprises an SAP
- 2 Executive Information System (EIS).
- 1 11. The system of claim 5, wherein the bridge program is further adapted to identify select
- 2 records of the dataset in accordance with at least one selection rule applied to the dataset, and
- wherein the portion of the dataset includes the select records so identified.
- 1 12. The system of claim 11, wherein to identify the select records includes to accept as input a

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 first date and a second date, wherein the first date is earlier than the second date, and wherein the selection rules do not permit identifying as a select record any record of the dataset having an

 4 (1)
 effective date that is earlier than the first date or later than the second date.
- 1 (1) 13. The system of claim 5, wherein the dataset is selected from the group consisting of a table, a spreadsheet, and a combination thereof.
- 1 14. The system of claim 5, wherein the report relates to procurement data, and wherein the rollup records include the procurement data.
- 1 15. The system of claim 14, wherein the procurement data is selected from the group consisting of purchase order data, invoice data, and a combination thereof.

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- 1 16. A system for generating a report by a reporting tool of a SAP business information system
- using and combining data included within N Aspect files $A_1, A_2, ..., A_N$ respectively having
- rollup records [R]₁, [R]₂, ..., [R]_N, said N at least 2, said system comprising at least one non-SAP
- 4 bridge program adapted to respectively generate the N Aspect files through use of data derived
- from select records $[S]_1$, $[S]_2$, ..., $[S]_N$ of N datasets D_1 , D_2 , ..., D_N , respectively, and to transmit
- 6 the N Aspect files to the SAP business information system, said select records [S]₁, [S]₂, ..., [S]_N
- having a common keygroup, wherein to generate the N Aspect files comprises, for i = 1, 2, ...,
- 8 and N:

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- 9 to identify the select records [S]_i in accordance with selection rules applied to D_i; and
- to roll up the select records [S]_i with respect to the common keygroup, wherein the rollup
- 11 records [R]_i corresponding to [S]_i have a rollup field and a quantity field, wherein the rollup field
- 12 stores a rollup keyvalue of the select records [S]_i, and wherein the quantity field stores the
- 13 \mathbb{S}_i number of select records of $[S]_i$ that have the same rollup keyvalue.
- 1 17. The system of claim 16, wherein a first dataset of the N datasets is a non-SAP-formatted
- 2 dataset.
- 1 18. The system of claim 16, wherein a first dataset of the N datasets is a SAP-formatted dataset.
- 1 19. The system of claim 16, wherein a first dataset of the N datasets and a second dataset of the N
- 2 datasets have different formats.

- 1 20. The system of claim 16, wherein the datasets D_1 , D_2 , ..., D_N have formats F_1 , F_2 , ..., F_N ,
- 2 respectively, wherein the at least one bridge program comprises N bridge programs P₁, P₂, ..., P_N
- respectively keyed to the formats F_1 , F_2 , ..., F_N for respectively generating the Aspect files A_1 , A_2 ,
- 4 ..., A_N .

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- 1 21. The system of claim 16, wherein the datasets D_1 , D_2 , ..., D_N have formats F_1 , F_2 , ..., F_N ,
- 2 respectively, and wherein the at least one bridge program consists of one bridge program having
- logical paths $L_1, L_2, ..., L_N$ respectively keyed to the formats $F_1, F_2, ..., F_N$ for respectively
- 4 $\frac{\mathbb{C}}{\mathbb{C}^n}$ generating the Aspect files $A_1, A_2, ..., A_N$.
- 1 22. The system of claim 16, wherein the selection rules are the same for each of the N datasets.
- 23. The system of claim 16, wherein the SAP business information system comprises an SAP

 Executive Information System (EIS).
- 1 24. The system of claim 16, wherein the report relates to procurement data, and wherein the
- 2 rollup records $[R]_1$, $[R]_2$, ..., $[R]_N$ include the procurement data.
- 1 25. The system of claim 24, wherein the procurement data is selected from the group consisting
- 2 of purchase order data, invoice data, and a combination thereof.

26. A method for generating a report by a reporting tool of a SAP business information system 1 2 using data included within an Aspect file, said method comprising executing a non-SAP bridge 3 program, said executing including: generating the Aspect file through use of data derived from a dataset; and 4 5 transmitting the Aspect file to the SAP business information system. 27. The method of claim 26, wherein the dataset is a non-SAP-formatted dataset. 1 28. The method of claim 26, wherein the dataset is a SAP-formatted dataset. Į. 29. The method of claim 26, wherein the SAP business information system comprises an SAP

Executive Information System (EIS).

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1 30. A method for generating a report by a reporting tool of a SAP business information system 2 using data included within an Aspect file having rollup records, said method comprising:

providing a dataset having a keygroup; and

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executing a non-SAP bridge program, including generating the Aspect file, said generating comprising rolling up a portion of the dataset with respect to the keygroup, wherein each rollup record has a rollup field and a quantity field, wherein the rollup field stores a rollup keyvalue of the keygroup, and wherein the quantity field stores the number of dataset records that have the same rollup keyvalue.

- 31. The method of claim 30, wherein generating the Aspect file includes causing the rollup records in the generated Aspect file to be sorted with respect to the keygroup.
- 32. The method of claim 30, wherein the dataset is a non-SAP-formatted dataset.
- 33. The method of claim 30, wherein the dataset is a SAP-formatted dataset.
- 1 34. The method of claim 30, further comprising generating a trace file that includes a
- 2 representative rollup keyvalue of the keygroup and a pointer that points to a portion of the
- 3 dataset, said portion being correlated with the representative rollup keyvalue.

- 1 35. The method of claim 30, wherein the SAP business information system comprises an SAP
- 2 Executive Information System (EIS).
- 1 36. The method of claim 30, further comprising identifying select records of the dataset in
- 2 accordance with at least one selection rule applied to the dataset, said portion of the dataset
- 3 including the select records so identified.
- 1 37. The method of claim 36, said identifying including accepting as input a first date and a
- 2 (ii) second date, said first date earlier than said second date, said selection rules not permitting said
- 3 till identifying to identity as a select record any record of the dataset having an effective date that is
- 4 earlier than the first date or later than the second date.
- 1 38. The method of claim 30, wherein the dataset is selected from the group consisting of a table,
- 2 iii a spreadsheet, and a combination thereof.

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- 1 39. The method of claim 30, wherein the report relates to procurement data, and wherein the
- 2 rollup records include the procurement data.
- 1 40. The method of claim 39, wherein the procurement data is selected from the group consisting
- 2 of purchase order data, invoice data, and a combination thereof.

- 1 41. The method of claim 30, further comprising:
- 2 transmitting the Aspect file to the SAP business information system where the Aspect file
- 3 becomes a Temp file having the rollup records;
- 4 making a query to sum over the quantity field for a subset of the rollup records of the
- 5 Temp file, wherein the subset is determined by the query, and wherein the query is adapted to
- 6 being executed by a SAP module in the SAP computing environment; and
- 7 executing the query by the SAP module including returning a result of the query.

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- 1 42. A method for generating a report by a reporting tool of a SAP business information system
- 2 using and combining data included within N Aspect files A₁, A₂, ..., A_N respectively having
- rollup records [R]₁, [R]₂, ..., [R]_N, said N at least 2, said method comprising providing N datasets
- 4 $D_1, D_2, ..., D_N$ having a common keygroup, and for i = 1, 2, ..., and N executing a non-SAP
- 5 bridge program, including:
- 6 identifying select records [S]_i of the dataset D_i, said identifying in accordance with
- 7 selection rules applied to D_i; and
- 8 rolling up the select records [S]_i with respect to the common keygroup, wherein the rollup
- 9 \(\mathref{I}\) records [R]_i corresponding to [S]_i have a rollup field and a quantity field, wherein the rollup field
- stores a rollup keyvalue of the select records [S]_i, and wherein the quantity field stores the
- 11 $\frac{1}{2}$ number of select records of $[S]_i$ that have the same rollup keyvalue.
 - 43. The method of claim 42, wherein a first dataset of the N datasets is a non-SAP-formatted
- 2 dataset.

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- 1 44. The method of claim 42, wherein a first dataset of the N datasets is a SAP-formatted dataset.
- 1 45. The method of claim 42, wherein a first dataset of the N datasets and a second dataset of the
- 2 N datasets have different formats.

- 1 46. The method of claim 42, wherein the datasets D_1 , D_2 , ..., D_N have formats F_1 , F_2 , ..., F_N ,
- 2 respectively, wherein the at least one bridge program comprises N bridge programs P₁, P₂, ..., P_N
- respectively keyed to the formats F_1 , F_2 , ..., F_N for respectively generating the Aspect files A_1 , A_2 ,
- 4 ..., A_N.

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- 1 47. The method of claim 42, wherein the datasets D_1 , D_2 , ..., D_N have formats F_1 , F_2 , ..., F_N ,
- 2 respectively, and wherein the at least one bridge program consists of one bridge program having
- logical paths L_1 , L_2 , ..., L_N respectively keyed to the formats F_1 , F_2 , ..., F_N for respectively
- 4 $\frac{1}{\sqrt{3}}$ generating the Aspect files $A_1, A_2, ..., A_N$.
- 1 48. The method of claim 42, wherein the selection rules are the same for each of the N datasets.
- 49. The method of claim 42, wherein the SAP business information system comprises an SAP

 Executive Information System (EIS).
- 1 50. The method of claim 42, wherein the report relates to procurement data, and wherein the
- 2 rollup records $[R]_1$, $[R]_2$, ..., $[R]_N$ include the procurement data.
- 1 51. The method of claim 50, wherein the procurement data is selected from the group consisting
- 2 of purchase order data, invoice data, and a combination thereof.

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52. The method of claim 42, wherein processing the Aspect file A_i further includes transmitting the Aspect file A_i to the SAP business information system where the Aspect file A_i becomes a Temp file T_i having the rollup records [R]_i, and wherein the method further comprises:

making a query to sum over the quantity field for a subset of the rollup records of the N

Temp files in composite, wherein the subset is determined by the query, and wherein the query is adapted to being executed by a SAP module in the SAP computing environment; and executing the query by the SAP module including returning a result of the query.

- 1 53. A computer program product, comprising a computer usable medium having a computer
- 2 readable program code embodied therein for generating a report by a reporting tool of a SAP
- 3 business information system using data included within an Aspect file, said program code
- 4 comprising a non-SAP bridge program adapted to generate the Aspect file through use of data
- derived from a dataset and to transmit the Aspect file to the SAP business information system.

1 54. A computer program product, comprising a computer usable medium having a computer 2 readable program code embodied therein for generating a report by a reporting tool of a SAP 3 business information system using data included within an Aspect file having rollup records, said 4 program code comprising a non-SAP bridge program adapted to generate the Aspect file through 5 use of data derived from a dataset and to transmit the Aspect file to the SAP business information 6 system, said dataset having a keygroup, wherein to generate the Aspect file includes to roll up a 7 portion of the dataset with respect to the keygroup, wherein each rollup record has a rollup field 8 and a quantity field, wherein the rollup field stores a rollup keyvalue of the keygroup, and 9 🗀 wherein the quantity field stores the number of dataset records that have the same rollup 10 keyvalue. ĹĮ, the street start Hand Hall Britte Land

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1 55. A computer program product, comprising a computer usable medium having a computer 2 readable program code embodied therein for generating a report by a reporting tool of a SAP 3 business information system using and combining data included within N Aspect files A₁, A₂, ..., A_N respectively having rollup records [R]₁, [R]₂, ..., [R]_N, said N at least 2, said program code 4 5 comprising at least one non-SAP bridge program adapted to respectively generate the N Aspect 6 files through use of data derived from select records [S]₁, [S]₂, ..., [S]_N of N datasets D₁, D₂, ..., 7 D_N, respectively, and to transmit the N Aspect files to the SAP business information system, said 8 select records [S]₁, [S]₂, ..., [S]_N having a common keygroup, wherein to generate the N Aspect 9 [] files comprises, for i = 1, 2, ..., and N: -[] 10 to identify the select records [S]i in accordance with selection rules applied to Di; and 11 [] to roll up the select records [S]i with respect to the common keygroup, wherein the rollup 12 records [R]; corresponding to [S]; have a rollup field and a quantity field, wherein the rollup field 13 📆 stores a rollup keyvalue of the select records [S], and wherein the quantity field stores the 14

number of select records of [S]_i that have the same rollup keyvalue.

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